



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,352	02/16/2001	Joerg Heuer	1454.1012	2838

21171 7590 09/16/2003

STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

CHEN, CHONGSHAN

ART UNIT	PAPER NUMBER
----------	--------------

2172

DATE MAILED: 09/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

09/784,352

Applicant(s)

HEUER, JOERG

Examiner

Chongshan Chen

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 34-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 34-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is responsive to communications: Amendment A, filed on 6/26/2003. Claims 1-22 and 34-38 are pending; claims 23-33 are cancelled.

### ***Response to Arguments***

2. Applicant's arguments filed on 6/26/2003 regarding claims 1-22 and 34-38 have been fully considered but they are not persuasive.

As per applicant's arguments regarding "does not enable the query structure and the database structure to reference a standard structure" have been considered but are not persuasive.

Machihara's information retrieval system allows the user to retrieve desired information from a plurality of storage location and database systems by simply specifying retrieval content and retrieval conditions using words familiar to the user, without having to know the names for the relevant database or their system structures or to interact with the meta-information platform (Machihara, col. 3, lines 26-32). The retrieval system having a information resource dictionary data allows the user to specify retrieval conditions and retrieval content using words that are familiar to the user, because the dictionary is utilized to convert the request items entered by the user to related data items used by different databases and database system so as to retrieve requested information from a plurality of storage locations and different database systems, according to the retrieval content and retrieval conditions specified by the user, without having the user to specify the names for databases or their structures (Machihara, col. 3, line 63 – col. 4, line 6). Because the names entered by the user during a search request might be different with the actual names used in the database system, the information resource dictionary serves as a

Art Unit: 2172

standard structure, both the query and the database system refer to the information resource dictionary to convert the requested items entered by the user to related data items used by database system.

3. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Machihara's system includes a middleware which is contrast to the present invention) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2 and 12-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Machihara et al. ("Machihara", 6,233,578).

As per claim 1, Machihara discloses a method for querying a database with database contents with a database structure comprising:

placing a query in a query structure that differs from the database structure wherein the query structure and the database structure reference a standard structure via a reference logic and

wherein the reference logic is at least one of: at least partially transmitted together with the query; and is at least partially present in the database (Machihara, col. 3, lines 26-62).

As per claim 2, Machihara teaches all the claimed subject matters as discussed in claim 1, and further discloses the reference logic is stored in the database (Machihara, col. 3, lines 33-62).

Claims 12-13 are rejected on grounds corresponding to the reasons given above for claims 1-2.

6. Claims 34-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Kappenberger et al. ("Kappenberger", 6,345,269).

As per claim 34, Kappenberger teaches a method of querying a plurality of databases, comprising:

submitting a query in an original query structure to a plurality of databases (Kappenberger, Fig. 3, col. 2, lines 61-67); and

separately revising the original query structure at each of the databases, to produce query structures searchable within the respective databases (Kappenberger, col. 2, lines 61-67, col. 3, lines 47-56).

As per claim 35, Kappenberger teaches all the claimed subject matters as discussed in claim 34, and further teaches the original query structure is revised in a decentralized fashion, without middleware (Kappenberger, col. 1, lines 60-63).

As per claim 36, Kappenberger teaches a method of querying a plurality of databases, comprising:

Art Unit: 2172

submitting a query to a plurality of databases the query containing information fields not contained in all of the databases (Kappenberger, Fig. 3, col. 1, lines 60-63, col. 2, lines 61-67); and

separately searching for the query at the plurality of databases, each database using a reference logic at the database to infer a relationship between fields in the database and fields in the query not contained in the database (Kappenberger, Fig. 3, col. 3, lines 47-56).

As per claim 37, Kappenberger teaches all the claimed subject matters as discussed in claim 36, and further teaches each database infers the relationship in a decentralized fashion, without middleware (Kappenberger, col. 1, lines 60-63).

As per claim 38, Kappenberger teaches a method of querying a plurality of databases, comprising:

submitting a query in an original query structure to a plurality of databases (Kappenberger, Fig. 3, col. 1, lines 60-63, col. 2, lines 61-67); and

separately revising the original query structure at each of the databases, independently of middleware, to produce query structures searchable within the respective databases (Kappenberger, Fig. 3, col. 3, lines 47-56).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-11 and 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machihara et al. ("Machihara", 6,233,578).

As per claim 3, Machihara teaches all the claimed subject matters as discussed in claim 1, and further discloses reference information describes database structures and reference logic (Machihara, col. 3, lines 33-62, col. 5, lines 29-45, col. 6, lines 17-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a standard descriptors to describe the standard structure, and the query structure and the database structure are described by these standard descriptors (GD) and/or more special descriptors (HD), wherein these more special descriptors (HD) reference the standard descriptors (GD) via the reference logic in order to convert the query into a structure that is understandable by the database.

As per claim 4, Machihara teaches all the claimed subject matters as discussed in claim 3, and further discloses standard descriptors (GD) present in the query structure are compared with the standard descriptors (GD) of the database, wherein identical standard descriptors (GD) are evaluated for the query (Machihara, col. 10, line 52 - col. 11, line 65).

As per claim 5, Machihara teaches all the claimed subject matters as discussed in claim 3, and further discloses the special descriptors (HD) present in the query structure are compared with the special descriptors (HD) of the database, wherein identical special descriptors (HD) are evaluated for the query (Machihara, col. 10, line 52 - col. 11, line 65).

As per claim 6, Machihara teaches all the claimed subject matters as discussed in claim 5, and further discloses dissimilar special descriptors (HD) are reviewed to determine whether a computation logic is present in the database, so that a respective special descriptor (HD) of the

Art Unit: 2172

database structure can be computed directly from the corresponding special descriptor (HD) of the query structure by means of the computation logic (Machihara, Fig. 2 & 3, col. 10, line 52 - col. 11, line 65).

As per claim 7, Machihara teaches all the claimed subject matters as discussed in claim 6, and further discloses the computation logic is stored in the database (Machihara, Fig. 2 & 3).

As per claim 8, Machihara teaches all the claimed subject matters as discussed in claim 7, and further discloses for dissimilar special descriptors (HD) for which no computation logic is present, a review is made to determine whether a reference logic to standard descriptors (GD) is at least partially present in the database (Machihara, Fig. 1-3, col. 10, line 52 - col. 11, line 65).

As per claim 9, Machihara teaches all the claimed subject matters as discussed in claim 7, and further discloses for dissimilar special descriptors (HD) for which no computation logic and/or no reference logic is present, a review is made to determine whether the reference logic was transmitted together with the query (Machihara, Fig. 1-3, line 52 - col. 11, line 65).

As per claim 10, Machihara teaches all the claimed subject matters as discussed in claim 7, and further discloses atomic elements defining the information and/or link of a special descriptor (HD) are used as the computation logic (Machihara, Fig. 1-3, line 52 - col. 11, line 65).

As per claim 11, Machihara teaches all the claimed subject matters as discussed in claim 10, and further discloses the atomic elements used are semantic, physical and linking atomic elements to define the semantic meaning, the physical memory structure, and the link between memory structure and semantics (Machihara, Fig. 1-3, line 52 - col. 11, line 65).



Art Unit: 2172

Claims 14-22 are rejected on grounds corresponding to the reasons given above for claims 3-11.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gustman (6,092,080) disclose digital library system (in a decentralized architecture, ... if a copy of the requested data does not exist at the local site, a search is made for the data at another site. col. 6).

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2172

***Contact Information***

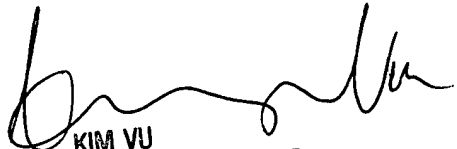
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is (703) 305-8319.

The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703)305-4393. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Chongshan Chen  
9/6/03

  
KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100